

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A filter apparatus, comprising:

a fluid passage body that has an inner surface defining a bore; and

a filter that fits in the bore of the fluid passage body,

wherein the filter includes:

an inlet section which is fixed in the bore of the fluid passage body at a peripheral surface thereof;

a filter section integral with the inlet section and having a plurality of holes to filter the fluid at a peripheral surface thereof, said filter section defining a tubular fluid passage with the inner surface of the fluid passage body; and

a closed end section integral with the filter section, wherein the closed end section is shaped so that a cross-sectional area between an outer surface of the closed end section and the inner surface of the fluid passage body increases gradually in a fluid flow direction,

wherein the inlet section defines an opening on an opposite end of the filter with respect to the closed end section, and

fluid enters into the opening of the inlet section, passes through an inside of the filter section, passes through the plurality of holes, and flows through the tubular fluid passage, wherein the fluid passage body is a fluid inlet of an injector.

2. (Previously presented) A filter apparatus according to claim 1, wherein the closed end section is approximately hemispherically-shaped, so that a diameter of the closed end section is decreased toward the fluid flow direction.

3. (Previously presented) A filter apparatus according to claim 1, wherein the

closed end section is approximately conically-shaped, so that a diameter of the closed end section is decreased toward the fluid flow direction.

4. (Previously presented) A filter apparatus, comprising:
a fluid passage body that has an inner surface therein, the inner surface defining a bore being a fluid passage; and
a filter that fits in the bore of the fluid passage body,
wherein the filter includes:
an inlet section fixed in the bore of the fluid passage body at a peripheral surface thereof;
a filter section integral with the inlet section and having a plurality of holes to filter the fluid at a peripheral surface thereof, said filter section defining a tubular fluid passage with the inner surface of the fluid passage body; and
a closed end section integral with the filter section,
wherein each of the holes is formed so that a diameter thereof is larger at a radially outer side of the filter section than at a radially inner side of the filter section,
wherein the inlet section defines an opening,
the inlet section is arranged on an end of the filter opposite to the closed end section,
fluid enters into the opening of the inlet section, and passes through an inside of the filter section and through the plurality of holes, and
the fluid flows through the tubular fluid passage after passing through the plurality of holes.

5. (Previously presented) A filter apparatus according to claim 4, wherein each of the plurality of holes is tapered to have the diameter gradually increasing toward the outer side of the filter section.

6. (Previously presented) A filter apparatus according to claim 4, wherein each

of the plurality of holes is stepped to have the diameter gradually increasing toward the outer side of the filter section.

7. (Previously presented) A filter apparatus according to claim 4, wherein the plurality of holes is shaped in different shapes.

8. (Previously presented) A filter apparatus according to claim 4, wherein the plurality of holes is shaped in two shapes among an approximate hemisphere, a straight bore and a tapered bore.

9. (Previously presented) A filter apparatus according to claim 4, wherein the closed end section is shaped so that a cross-sectional area between an outer surface of the closed end section and the inner surface of the fluid passage body increases gradually in a fluid flow direction.

10. (Currently amended) A filter apparatus, comprising:
a fluid passage body that has an inner surface therein, the inner surface defining a bore being a fluid passage; and
a filter that fits in the bore of the fluid passage body,
wherein the filter includes:
an inlet section fixed in the bore of the fluid passage body at a peripheral surface thereof;
a filter section integral with the inlet section and having a plurality of holes to filter the fluid at a peripheral surface, said filter section defining a fluid passage with the inner surface of the fluid passage body; and
a closed end section integral with the filter section, wherein the closed end section has no hole to disable flow of the fluid in an axial direction,
wherein the inlet section defines an opening on an opposite side of the filter with respect to the closed end section, and

fluid flows from the opening of the inlet section to the fluid passage after passing through an inside of the filter section and through the plurality of holes, wherein the fluid passage body is a fluid inlet of an injector.

11. (Previously presented) A filter apparatus, comprising:
a fluid passage body that has an inner surface defining a bore therein; and
a filter that fits in the bore of the fluid passage body,
wherein the filter includes:
an inlet section fixed in the bore of the fluid passage body at a peripheral surface thereof;
a filter section integral with the inlet section and having a plurality of holes to filter the fluid at a peripheral surface, said filter section defining a tubular fluid passage with the inner surface of the fluid passage body; and
a closed end section integral with the filter section,
wherein the tubular fluid passage has a cross-sectional area which is equivalent to or smaller than a summation of cross-sectional areas of the holes at the peripheral surface of the filter section,
wherein fluid flows from an opening of the inlet section on an opposite side of the filter with respect to the closed end section, and flows into an inside of the filter section, and
the fluid flows from the inside of the filter section to the tubular fluid passage through the plurality of holes.

Claim 12. (Canceled)

13. (Previously presented) A filter apparatus according to claim 4, wherein the fluid passage body is a fluid inlet of an injector.

Claim 14. (Canceled).

15. (Previously presented) A filter apparatus according to claim 11, wherein the fluid passage body is a fluid inlet of an injector.